

SUPPLEMENT.

The Mining Journal, RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

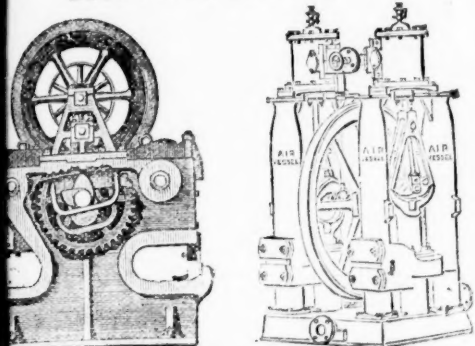
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2127.—VOL. XLVI

LONDON, SATURDAY, MAY 27, 1876.

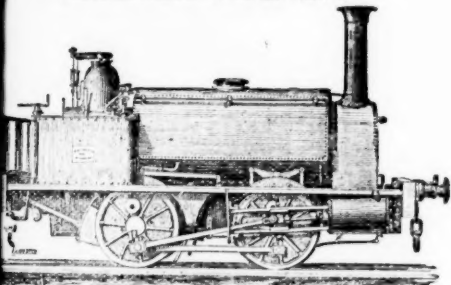
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A DIPLOMA—HIGHEST OF ALL AWARDS—given by the
Geographical Congress, Paris, 1875—M. Favre, Contractor, having
exhibited the McKean Drill alone as the MODEL BORING MACHINE
for the ST. GOTHARD TUNNEL.

SILVER MEDAL of the Highland and West of Scotland
Agricultural Society, 1875—HIGHEST AWARD.

At the south end of the St. Gothard Tunnel, where

THE MCKEAN ROCK DRILLS

Are exclusively used, the advance made during eight consecu-
tive weeks, ending February 7, was 24-90, 27-60, 24-80, 26-10,
28-30, 27-10, 28-40, 28-70 metres. Total advance of south head-
ing during January was 121-30 metres, or 133 yards.

In a series of comparative trials made at the St. Gothard Tun-
nel, the McKean Rock Drill continued to work until the pres-
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almost the entire motive force to be available for the blow
against the rock—a result of itself indicating many advantages.

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most portable—the most durable—the most compact—of the
best mechanical device. They contain the fewest parts—have
no weak parts—act without shock upon any of the operat-
ing parts—work with a lower pressure than any other Rock
Drill—may be worked at a higher pressure than any other
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PER MINUTE—do not require a mechanic to work them—are
the smallest, shortest, and lightest of all machines—will give
the longest feed without change of tool—work with long or
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- 3.—FROM 60 TO 70 PER CENT. OF THE LABOUR IN DRESSING, AND
FROM 5 TO 10 PER CENT. OF ORE OTHERWISE LOST, IS SAVED.
- 4.—THEY ARE THE ONLY MACHINES THAT MAKE THE ORE CLEAN
FOR MARKET AT ONE OPERATION.

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and abroad—viz.,

The Greenside Mines, Patterdale, Cumberland; London Lead Company's Mines
Darlington, Colberry, Nanthead, and Bollyhope; the Stoncroft and Greyside
Mines, Hexham, Northumberland; Wanlockhead Mines, Abington, Scotland (the
Duke of Buccleuch's); Bewick Partners, Haydon Bridge; the Old Darren, Es-
gairmyn, and Ystumtuen Mines, in Cardiganshire; Mr. Beaumont's W.B. Mines,
Darlington; also Mr. Sewell, for Argentiferous Copper Mines, Peru; the Brats
berg Copper Mines, Norway, and Mines in Italy, Germany, United States of
America, and Australia, from all of whom certificates of the complete efficiency of
the system can be had.

WASTE HEAPS, consisting of refuse chatts and skimpings of a
former washing, containing a mixture of lead, blende, and sulphur,
DRESSED TO A PROFIT.

Mr. BAINBRIDGE, C.E., of the London Company's Mines, Middleton-
in-Teesdale, by Darlington, writing on the 20th March, 1876, says—"The yearly
profit on our Nanthead waste heaps amounted last year to £600, besides the ma-
chinery being occupied for some months in dressing ore stuff from the mines. Of
course, if it had been wholly engaged in dressing wastes our returns would have
been greater; but it is giving us every satisfaction, and bringing the waste heaps
into profitable use, which would otherwise remain dormant."

Mr. T. B. STEWART, Manager of the Duke of Buccleuch's Mines,
Wanlockhead, Abington, N.B., writing on 20th March, 1876, says—"I have much
pleasure in stating that a full and superior set of your Ore Dressing Machinery has
been at work at these mines for fully a month, and each day as the moving parts
become smoother, and those in charge understand the working of the machinery
better, it gives increasing satisfaction, the ore being dressed more quickly, cheaply,
and satisfactorily than by any other method."

Mr. BAINBRIDGE, speaking of machinery supplied Colberry Mines,
says—"Your machinery saves fully one-half on old wages, and vastly more on the
wages we have now to pay. Over and above the saving in cost is the saving in ore,
which is not much short of 10 per cent."

GREENSIDE MINE COMPANY, Patterdale, near Penrith, say—"The
separation which they make is complete."

Mr. MONTAGUE BEALE says—"It will separate ore, however close
the mechanical mixture, in such a way as no other machines can do."

Mr. C. DODSWORTH says—"It is the very best for the purpose,
and will do for any kind of metallic ores—the very thing so long needed for dress-
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Original Correspondence.

PACIFIC COAST MINING NOTES—THE RICHMOND
IMBROGLIO.

SIR,—I regret that I am compelled to lay over to a future occasion any further reference to the Fryer process, to which I incidentally called attention of your readers last week. I may, however, recall the attention that it is a grand success, and that the company mark *en passant* has already taken the necessary measures to extend the owning it has already taken the necessary measures to extend the sphere of its usefulness by immediately erecting branch works in connection with a celebrated mine located in the Pearine district, and not far removed from Reno, on the line of the Central Pacific Railroad. The ores of this locality are reported rich; they are also very refractory according to Mr. Fryer's testimony, he having encountered more difficulty in reducing them than he met with from the other ores on which he experimented. Could this process be utilised in the reduction of the Richmond ores, I can readily understand the gratifying results that would follow its introduction, but it cannot; the loss from oxidation would be far too great to justify the experiment. The base contained in the Richmond ore, indeed, in all the ores of the Eureka district, with but few exceptions, is too valuable, and, therefore, too necessary an auxiliary in augmenting the financial balance-sheet, to be allowed to go to waste. Nothing remains, then, for its shareholders but patience, and the inauguration of a sounder policy in choosing their agents than has been heretofore pursued.

I have on former occasions pointed out the evils that sooner or later would surely result to the interests of the company here from its predilection in favour of English or Cornish trained superintendents and managing directors. Facts are stubborn things to deal with. They have in this as in other instances borne indisputable evidence of the truth of my past not very reliable assertions. Those gentlemen are well enough in their way, but their ways and prejudices, in as far as relates to Old Country practices, have been the means of impairing the very interests which they were intended to promote, pairing the conditions which may have contributed to their success elsewhere do not exist in Nevada, whose geological and mineralogical characteristics are widely different from those of Europe, and they also differ in essential points from the attributes of other sections of this country. We are all of us more or less disposed to adhere to the principles inculcated in early life; this is just as true of the miner and mining superintendent and manager as it is of anybody else. Custom and habit usually exercise over us, though perhaps unconsciously, an arbitrary sway, which sometimes we find much difficulty in successfully resisting. It is only when a man finds himself transplanted from under his native skies to more progressive fields of labour, where flourishes the active enterprise that supports and fosters it, that he begins to experience the evils which arise from the vicious prejudice and one-sided training of "Auld Lang Syne." But it may querulously be urged that "educated persons at least are free from the prejudices that inherently spring from ignorance." Such is not the case, however, for there are very many of those who plant themselves on the strength of their liberal opinions, and no less than they do upon their mental accomplishments, who entertain in relation to some things just as strong prejudicial feelings as could well fill the mind of the most untutored. Uncle Toby, of illustrious memory, had his hobby horse, and so has every man of an unreflective turn of mind. But are English superintendents and managing directors less given to indulge in useful mental reflection than are American when filling like positions? I opine not. It will not do though to measure the usefulness and practical experience of the latter by the standard of excellence attained here by some. The last-named (without being partial) have shown how much can be accomplished in any department of metallic mining, as carried on here, by plain, practical, common-sense men, to many of whom, until a few brief years ago, Nevada was a veritable *terra incognita*, a sort of wilderness, where only those Ishmaels of the desert, the predatory Indian and his swarthy patient helpmate, could exist in comfort. The majority of those men possessed no accurate conception of the actual requirements of mining previous to their coming to these shores, and not till they themselves took a part in its operations did they have a thorough understanding of the character of the physical and mental qualities that were indispensable to him who from choice followed it, for not only a living, but also for the sake of the fortune which he some day hoped to win from its vast resources by his labour and intelligence. Yet there are many in our midst who wish that some other pursuit than this had engaged their attention when they first set foot on the auriferous soil of the golden State, as well as upon the argentiferous hills of its no less august sister, Nevada. The wand of the subtle Fortunio does not always bring its riches and gladness to whomsoever it touches; if it did there would be more bonanza kings than there are imperial kings for the multitude to pay homage to as the price of their greatness. The kings of the Comstock, who a short while ago exercised so little influence in the financial atmosphere of this cosmopolitan city, have good cause to bless the wand of Mistress Fortunio, for it has, providentially for themselves, bestowed upon them such stupendous fortunes, power, and patronage as probably they never even hoped to possess. Yesterday they walked abroad unknown and unrecognised outside of the circle in which they moved, while to-day they are the best known and most talked of men of the period. Their wealth, though great as it is, affords them no protection from the abusive language of disappointed stock speculators. These unfortunates are not few at this time, owing to the wicked manipulations of those giants of the Stock Exchange who construct rings within rings for the purpose of fleecing the pignies who obsequiously watch their every movement; and who also, with a sort of infatuation worthy of Ingomar himself, would as soon think of doubting their own existence as they would think of doubting the words and the correctness of the "points" given them by those men.

The San Francisco Stock Market is thoroughly, and I fear hopelessly for this season, demoralised. Securities which when I wrote last were in active demand for investment purposes at enhanced figures have since so depreciated in value that all confidence is, or appears to be, withdrawn from them, whilst those misguided ones who bought on margins, trusting to the honour of brokers, were sold out at the very first intimation received of what had long been expected by the knowing ones round the precincts of California-street. This is the Wall-street of the Pacific, and it is to here are every morning, at the opening of the stock board, bent the rapid steps of anxious operators who come to feel the mining and financial pulse ere they commence the day's undertakings. Fortunes are often made and lost on a single transaction, so that he who, perhaps, partakes of the nutritional meal amidst luxurious surroundings, may have to smoke the postprandial Havana uncheered by the hopes and aspirations that were his companions while Aurora was enjoying her early ablutions. Such are the vagaries of Fortune on the shores of the Occident.

But to return to our subject once more. There seems to be no good reason why the monthly net product of the Richmond should not be as large now as it was while under the management of Mr. McGee, and as it proved to be for a few months subsequently to his resignation of the important trusts confided to his keeping. The present ore reserves are not only rich in silver and lead—and the latter, as we know, is quite a desideratum, because of its value as a factor in promoting the rapid and successful reduction of quartz or less leaded ores—but they are also known to be equal in bulk and value to the reserves that had been accumulating during his administration, and which were partly extracted and smelted at the time that he left, which was some time about April, 1875. Mr. Probert, who reached this country from England on June 1 following, assumed charge a few days after. Immediately afterwards that memorable strife with the charcoal men was inaugurated, and it was a strife, too, which at one time threatened very serious consequences to not only the gentleman who was instrumental in producing it, but to the interests of the company likewise. I am in possession of all the facts relating to that and subsequent impolitic transactions. However, it is no business of mine at this late date to resuscitate issues that had better be left to the repose of oblivion. I threw considerable light upon some of these things before, and for so doing I was

coarsely assailed in the Journal by a self-constituted champion, who if he knew anything ought to have known that the causes of complaint as then specified were substantially correct. Their seriousness, too, precluded the possibility of their being made without just grounds having been had for making them. Yet my motives were impugned, and discredit sought to be cast upon the whole proceedings by this modern Don Quixote for having dared to expose the penny wise and pound foolish doings of his protégé.

When will English shareholders in American mines learn to distinguish the difference between tweedledum and tweedledee, between unmeaning cant and truthful assertion, or when will their unyielding natures allow them to trample upon and eradicate from their minds the baneful national prejudices which have so largely contributed to the ruin of their mining speculations on this Coast? Have not the failures and experiences of the past few years been ample enough to satisfy their scepticism, to reprove their acts of folly and extravagant expenditure, and to admonish them to adopt such measures and the employment of such ability as will in future secure them against the fraud, inefficiency, and charlatanism of which they have occasionally been the victims? Need I cite proof to sustain the full force and applicability of the foregoing? If I must, I need not go far to find it. The depleted treasury of the Richmond affords a convincing illustration. That other stupendous blunder, too—the offspring of vanity and unsatiable egotism—the erection at Eureka of the Rozan Separating Works instead of at this city or some other central point, to which base bullion could find ready and cheap transit, exhibits still another glimpse of the grave errors which are capable of being committed by men accustomed to the prodigal disbursements of corporate earnings. No such costly toys would be thought of if the bills had to be footed by themselves. However, the Rozan Works have the merit of being ornamental and substantial structures, if no other. Should not these things give some satisfaction to shareholders, even though they have helped to impair the financial standing of the company, retard dividends, and create a necessity for the issuing of interest-bearing debentures to the tune of 50,000*l*, only 35,000*l* of which has, I am informed, been yet subscribed for. But apart from these trifles, I cannot avoid giving Mr. Probert credit for many things. His honesty is unimpeachable, and so is the sincerity of his purposes, so far as his management of the financial and executive departments of the Richmond are concerned, but is he always right? His mining experiences, too, may not be altogether as practical nor yet so extensive as some of his admirers delight to affirm. But if he was seconded, assisted, and influenced by a competent, firm, and able superintendent, who, knowing his duties, dared perform them, even if not sanctioned by the managing director, provided he was solely constant to the interests of the company, and possessed enlarged views and sound judgment in disposing of matters of detail, Mr. Probert would, doubtless, do well enough. But a superintendent should be placed above the restraints of a crotchety, fault-finding resident director, who may be, for aught I know, perfectly qualified for the position he fills; but if we are allowed to pay attention to public report, then public report says he is not the right man in the right place. Neither national antipathies nor sympathies should find a place in the breast of a mining superintendent. No man nor class of men should be favoured at the expense of another class of a different country. All should be treated alike; then no cause for complaint would exist. A man induced with the absurd proclivities which seemingly influence the choice of employees, and in the manner of letting contracts for the extraction of ore, should not be sent to a country like this to supervise any interest held in it by English capitalists. What can equal the folly of a man who would let to a couple of irresponsible Cornishmen a contract for extracting and mining all the ore found in the lower levels of the mine, and that such figures as would apparently preclude for another six months, or perhaps longer, the payment of another dividend. Nothing prevented the consummation of this proceeding but the hostility of the discharged miners, who formed a hasty coalition with the Miners' Union of Eureka, whose members warned both the superintendent and the contractors that such a course would not tamely be submitted to. Had there been publicly invited bids for a contract to do the work according to specifications, thus giving all a fair chance, the miners would have quietly acquiesced; but when, with characteristic prejudice, the contract was let privately to the two men indicated, it was more than could be borne quietly by men who wanted employment. Again, when the mine was shut down the engine, boilers, &c., connected with the smelting department needed overhauling, and to do this a machinist was sent for all the way from London, though it should have been known there were just as good as the imported article to be had at either Eureka or here. This is proof of the folly that has prevented dividends being paid. Did Mr. Probert sanction the foregoing high-handed and most injurious acts?

The sort of man which the Richmond people want on this side of the Atlantic, to look after their mine and money affairs, in addition to a superintendent and a good reliable foreman, is a thoroughly qualified mining engineer, who would report periodically on the condition of the mine, the approximate amount of its reserves, its future outlook, and advise as to the best and least expensive method of development to be adopted. Such a man need not reside at Eureka, and he could also act as financial agent if such an officer were found to be needful to the well-being of the company.

Here are given gratuitously some considerations worthy the thought of Mr. Hopkins, the board, and its chief, Mr. Elliott. The Richmond is as valuable to-day as it ever has been at any time since its incorporation. In its subterranean depths lie inexhaustible sources of future supply, and the deeper have been carried the explorations, and the more extensive have become its lateral and longitudinal workings, the better and more abundant has the ore also become. According to Prof. Price's estimate, made for the satisfaction of the bullion agent at a time when the indebtedness of the company to him was not far from \$800,000, there were from 85,000 to 90,000 tons of reserves on hand; this was an honest opinion, for Prof. Price is chary of his well-earned reputation, and if a limestone horse was hid beneath the superincumbent mass it was no fault of his, for professors are not more gifted with the power of seeing through stone walls than are other people. Facts have, however, borne out his statements. J. D. POWER.

San Francisco, April 28.

ECLIPSE GOLD MINING COMPANY.

SIR,—That the Eclipse Mine is one well deserving an effective development has never been questioned, even by those who in former times cavilled about the administration of its affairs, nor can it be doubted that, notwithstanding a considerable expenditure of capital has taken place, the property has never yet been worked in any measure equal to its merits. Everything has been done by the present directors and present manager to bring about such results as are unhesitatingly believed to be imminent upon adequate development. Nearly the whole of the capital yet subscribed has been found by the directors and their friends, who are still prepared to support their opinion of the mine by again putting their hands in their pockets towards the ensurement of that success so confidently anticipated. Beyond this men cannot go. Would that more commendable examples could be found, as nothing would sooner redeem American mining from its present vortex.

To Mr. Willett much is due, more than shareholders can possibly repay. Twice has this gentleman visited the mine, and the value of the information obtained, and the beneficial influence brought about thereby, cannot be measured by ordinary appreciation, nor the results therefrom accruing over-valued. What practical advantage, however, is all this so long as the shareholders do not come forward and pecuniarily assist those whose means have demonstrated the mine to be a valuable one, requiring only vigorous working? Strange it is to observe the idiosyncrasies of that class known as the investing public; headlong and recklessly do they often associate themselves with ill-organised and immature schemes, that the most superficial investigation would have disclosed to contain inherently the elements of their own untimely end; while, as in the case of the Eclipse Mine, hesitation is apparent on the part of those already pecuniarily interested to actively co-operate with their directors—an attitude at least retarding the achievement of the desired end.

All immediately required would seem to be additional bullion-saving machinery—in itself an amply sufficient inducement for us to readily step forward with our means. Regretful, indeed, will it be if we allow a proved mine to pass into other hands to reap the fruits of our patience and outlay, and at the same time we should be paying a very sorry compliment to our directors and manager, who have boldly, and almost unassisted, brought the mine into a condition of incipient prosperity.—May 24. SHAREHOLDER.

CREDIT FONCIER OF ENGLAND (LIMITED).

SIR,—In last week's Journal there is a letter from "A Shareholder" in reference to the remuneration paid to the directors and managers of this company, as well as the extravagant rent paid for offices, and no dividends paid to shareholders. Being a shareholder in this company, to my mind it is not so much a question as to the amount of remuneration paid for the services of directors and managers, but as to whether they are competent to fill those respective positions. This company being a large financial and commercial undertaking, to be successfully carried out should be governed by men of business habits and commercial experience. In the present position of the company this seems to me a matter for grave consideration by the body of shareholders, and it may become a question if it is not desirable to increase the present board of directors by men of commercial experience and business habits, looking to the fact that the present remuneration paid to the board is quite ample for that purpose. JAS. W. BAKER.

Holly Bank, St. Leonard's-on-Sea, May 23.

PLANT V. THE BLAKELY HALL COLLIERY COMPANY
(LIMITED)—NOW IN LIQUIDATION.

SIR,—A few weeks ago (April 8 I think) we had in the Journal two accounts of the proceedings at law in this case with the result; and although it was stated that Mr. Plant "must, as a matter of course, apply for a new trial," but few expected he would do so, but give it up as all lost; and whether he took the hint from the Journal or his law advisers and friends, it is not for me to say, but we now know that notice was given for a new trial, and the strongest possible opposition raised against it by the trustees, purchasers, &c. The injunction or motion to set aside his application was heard to-day before the Lords in the Appeal Court, who righteously resolved that his appeal should be heard, and I can say that all the people I have seen in Court and out of Court on the subject feel highly pleased at the result. It will be remembered also that the Master of the Rolls had not heard the case when he very wisely, and no doubt very kindly, suggested the course he did with a view of bringing the matter to an end; and while I in common with many in and out of Court rejoice at the result of to-day's trial (which was on points of law between counsel and not on the merits of the cause), I was sorry to hear it said in Court that the well-timed and well-intended settlement of the Master of the Rolls had been set aside by a person whose position ought to have been a guarantee for better conduct. That there have been great mistakes made, or wrongs committed, in connection with this undertaking everybody believes; and it may be if the facts from the beginning to the end are brought out in Court we shall be wiser, and perhaps better. I think Mr. Plant will do well to call all the bondholders around him, and take their opinion as to whether it will not be well to take action in another form. No doubt he has the bondholders with him, as he is fighting their battle. ONE INTERESTED.

London, May 24.

BLAKELY HALL COLLIERY.

SIR,—In the Journal of May 20 I find a letter from a bondholder of this company, referring to the sale of this colliery for 17,200*l*. The Chairman of the company and others, and I would advise the writer to communicate with Mr. R. Plant, one of the largest bondholders of the company, who has this day moved the Court for a further investigation of this sale, who is using his best endeavours to protect the interests of the bondholders. The best course to adopt would be to call a meeting of the whole of the bondholders, and then determine the course they will adopt to protect their interests.

20, Great George-street, Westminster, May 24.

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MINING IN THE VAN DISTRICT—THE SAINT HARMON MINE.

SIR,—You last week stated that the whole of the capital had been subscribed privately to resume operations and thoroughly develop "this once famous mine," situated in the Van district, its main lode being parallel to the Van, running nearly due east and west, and containing every essential geological feature to ensure a profitable and lasting mine. Would some of your correspondents kindly afford some additional information in connection with the previous history of the St. Harmon Mine, why it was "once famous," and when? As a confident believer that, as elsewhere, the Van parallel lodes will prove far richer than anything to be realised from the extension of the parent vein, the information now asked for would be of great interest and value to— A SHAREHOLDER IN VAN.

May 24.

COPPER DEPOSITS AT NANTLLE VALE, CARNARVONSHIRE.

SIR,—I have already stated that it is in connection with the slides that the largest deposits of copper are found, and also that in places where the strata are dislocated and contorted the lode has yielded thousands of tons of ore in a single deposit. Those slides that have conducted most to the productiveness of the lodes are those which intersect them at an angle of from 30° to 45°. At Symdde Dylluan Mine, which I have been told on good authority has paid as much in some years as 2000*l*. per year in royalty, one of those slides strikes across the lodes at an angle of about 30°, and has caused the deposition of the greater part of the ores which have been sold.

As said in my last letter, this is seen cropping up to the top of the mountain. A little below that point a large course of ore was discovered, and many hundred tons of ore extracted above the adit level, almost in the daylight, yielding from 15 to 18 per cent. of fine copper. I have been told by those who have seen it that it was almost entirely free from waste, and they had nothing to do but wheel it out through a short level to the dressing-floors, crush it down, and send it direct to market. I have seen it stated that the deposits of copper in the neighbourhood of Snowdon are like cauliflower. Facts in connection with these mines go to prove otherwise, for this bunch—or rather course—of ore has continued down to the 80 fm. level, and from a winze sunk at this point about 8 ft. I have extracted 10 tons 8 cwt. of ore, yielding 10 per cent. of fine copper. There are places between those points where the lode—or rather the course of ore—has been contracted, owing to some change in the condition of the surrounding rock, or through a little to the one side or to the other by a disturbance of the same, sometimes opening out from 6 to 10 ft. wide—an occurrence which took place in the sinking of the last lift. Through one condition or another it has continued to a depth of nearly 100 fms., and not yet cut off—a wonderful freak in Nature to produce a cauliflower of such a shape.

A stranger in going underground in the eastern part of this mine would be led to think that the bearing of the main lode is about 60° west of north as the main course of ore, on which the levels are driven, runs in that direction, but the true bearing of the lodes is about due east and west. This diversion of the course of ore is due to the influence of the slide, which carries the copper along with it from one lode to the other, itself, as it were, becoming the parent, or, as the natives term it, *y mam copr* (the mother of copper). In the western part of the mine the slides take another direction—a bearing to the east of north, and therefore, having the same influence on the lodes, the bunches of ore are carried away in that direction, and dip towards the courses of ore in the eastern section of the mine. In the former, as well as in the latter, the courses of ore have made close up to the surface, but they have not that regularity on account of there being more dislocations caused by the slides, which are more on number, and the contortions of the strata caused by some other force; yet by taking a view of the working plan and sections it will be seen that the whole form an average dip and bearing similar to

the one already described, but in an opposite direction. It is the opinion of learned and practical men who are acquainted with this mine that at the combining point of these converging slides a greater course of copper is to be found than any yet seen in the mine. Of course, this is a point which yet remains to be proved, but after studying every detail of the various changes and modifications of the lodes, slides, and rock formation, I can but come to the conclusion that those gentlemen are fully justified in giving such an opinion. You will kindly allow me to inform Mr. S. Trevelthan that I do not expect to enlighten those men who prefer shutting their eyes and bending at the shrine of a bacchanalian deity to the reading carefully of the great book of Nature.

JOHN ROBERTS.
Symde Dyllum, North Wales, May 23.

Mining in Cardiganshire.

Sir,—There can be no doubt that mining in Cardiganshire is at a low ebb just now. But would it not be better for those champions of its merits to agree upon a programme before appearing before the public as advocates of its claims? On reading the letter of Mr. S. Trevelthan, C.M.E., in the Supplement to last week's Journal, it occurred to me how true is the old adage, that "two of a trade never agree." If those gentlemen really wish to benefit mining in the county from which and of which they write, for Mr. Trevelthan's letter is followed by two others on the same subject, they had better adopt some other method, or else agree upon a line of procedure in respect of which something like unanimity of opinion would be observable. The question, "When doctors differ who shall decide?" is a perplexing one, and when consulting mining engineers hold, and not only hold but propagate, opinions diametrically opposed to each other, confidence in them or the subject upon which they so eloquently dilate is not likely to be of a very staple order. If there are rules by which the prospective as well as the intrinsic value of mines can be approximately ascertained, it is difficult to understand how the unbiassed judgment of experienced practical miners can so differ in the conclusions they arrive at, and hence it is that motives are inferred as instigators of the respective judgment. In the present case I have no intention of saying that there were any motives other than laudable. But when differences violently manifest themselves where consonant opinions might reasonably be expected it is inevitable to infer that some lower faculty than the judgment or understanding enlightened by practical and scientific experience has been consulted.

Mr. Sampson Trevelthan, C.M.E., betrays a great deal of animus as well as exclusiveness in his letter. He appears to be desirous of not only monopolising Cardiganshire as a delineator of its mines and their great merits, but Carnarvonshire also. I fail to see in what way the letters of Mr. Roberts could give offence to him. It is no great commendation to a civil and mining engineer to assume that matter is stationary, and that it has been so from the beginning. Motion, if not the vital principle of the material universe, is certainly its manifestation, and no single atom throughout illimitable space is beyond its province, law, and power. It may be beyond the penetrative power of Mr. Trevelthan, but it is certainly within the ken of thousands of others, supported by facts which that gentleman would labour in vain to disprove. He spoke of "the agent of Nature" as if Nature had but one. Will he be good enough to inform us what he meant by using that term?

MINER.

Cardiganshire Mining.

Sir,—Mr. Sampson Trevelthan objects to "Hard Times" not signing his name. If "Hard Times" were making a personal attack on any one, or were a mining engineer seeking to rehabilitate his reputation, it would probably be not only right but judicious to sign his name, but as he is only seeking to benefit the cause of mining, and cannot write M.E. after his name, it is better to leave him to his obscurity, and to leave the cause of Cardiganshire mining in the hands of "Sampson" and "Absalom," trusting that the former may not, like his namesake, finish up by pulling the Temple down about its proprietors' head. I hope I never caused anyone to think that Cardiganshire was full of used-up mines. All I wish to convey was that it seemed a pity to pay large sums of money for machinery, &c., on mines which were idle, when a little money laid out in a new place might lead to a new discovery. As to local people not assisting mining, if Mr. Trevelthan has failed to induce any of the natives to join in any of his speculations he should not condemn the lot wholesale, as there are a good many thousands of Cardiganshire money invested on mines in this county, and judiciously invested too, and the same may be said of the neighbouring county, Montgomeryshire, and the landlords of both counties are well disposed towards mining—the Crown officials always excepted. And before long there will be a revival of public confidence in home mining, it remains to be seen whether Cardiganshire will get a share, or remain, as now, in—

Aberystwyth, May 23.

Cardiganshire Mines, New and Old—No. V.

Sir,—I promised in my last to give you a description of Barthilwyd grant, which I inadvertently wrote for Pen-y-derllwyn-goch, through which farm the veins of Glog Fach and Logylas pass for nearly a mile on their course, being as nearly as possible due east and west. These two lodes unite at the mouth of the Bron Caradoc adit level, which is distant only 10 fms. from the brook which forms the boundary between the Pen-y-derllwyn-goch and Bron Caradoc. The lode in the adit level at Bron Caradoc has been opened on for more than 100 fms. in length, and shows as fine indications for becoming immensely rich in depth as any vein to be seen in this very rich district, and portions of the same, as I before stated, have been worked without the aid of crushing machinery at 5s. in 11.

To prove the veins in the Pen-y-derllwyn-goch grant, and on the west side of the brook, an adit cross-cut has been started to the north of the lodes, and has been driven to within about 25 fms. of reaching them, and where it will intersect them having a back of from 10 to 15 fms., where we may reasonably expect to lay open ore ground sufficiently valuable to pay for exploring the veins westward, in which direction the ground rises until the adit level will have ultimately attained a back or cover of from 70 to 80 fms.

There is every convenience for the erection of water machinery, an ample supply of water, and a railway station within two miles of the mine, where materials could be supplied, and the ore carried; and, in concluding this, I do not hesitate to express an opinion that this is one of the properties that for a very small outlay could be made a permanent and profitable mine for the next century. To the north of this about a mile the Grogwinion lode passes through a farm called Pen-lan, the property of John Davies, Esq., of Antaron. The Grogwinion lode was found or laid open by making the Manchester and Milford Railway, and fine stones of lead ore extracted from it, as well as from a fine cross lode that intersects it in the same grant or farm, which has been let to a local party at 1-20th royalty. About 5000l. would drive in an adit level from the brook, where there is an abundant supply of water for all purposes all through the year, to reach the junction of the Grogwinion lode and the cross-course alluded to at a height of 50 fms., and where I am persuaded a rich mass of ore would be found. To the east of the two mines I have been writing about are the old and celebrated Grogwinion, Frongoch, Cwmystwith, Log-y-las, Glog Fach, and Glog-fawr Mines, the richest group in the Principality, taken as a whole; and I really believe a few thousand pounds sterling only is required to lay open as rich a field as those to the westward. There is nothing between them to interfere with the bearing of the veins, and the channel of rock is identical, and as good as the best for producing great bodies of ore.

Before concluding this I would remark that my attention was called to a letter in last week's Journal, signed by Samuel Trevelthan, C.M.E., who would seem to intimate that my reasons for touching on Great West Van and West Esgrig lie were to show the Temple Mine was a good one. I am as much interested in one as the other of these properties, not holding a share in either, and my remarks on each have been given precisely as I thought of them. Captain S. Trevelthan must have dreamed what he says I said of West Esgrig

lie and mundie, as if he were again to read what is stated in the Journal of the 13th he will find I have made no remarks about that mineral in that mine.—Goginam, May 23. ABSALOM FRANCIS.

Mining in Ireland.

Sir,—During a recent journey in the South-West of Ireland I had business matters which required me to remain a couple of days in the pretty little town of Kenmare. It is midway between Killarney and Glengarriffe, and delightfully situated on the banks of the River Roughty, at the head of Kenmare Harbour. Thousands of tourists from all parts of the world pass through this town every summer, but they have no idea of the beauty of the scenery off the beaten track laid down in guide-books. A friend drove me some miles east of Kenmare, through the Roughty Valley, and a more delightful drive cannot, I think, be found. The formation of the Roughty Valley consists of carboniferous limestone, near the junction of which and soft clay and slate my friend pointed out to me some of the most extensive "old iron mines" in the United Kingdom, which ceased to work some 200 years ago when the wood for smelting the ore became exhausted. Copper lodes occur also near the junction of the strata of superior quality. A short distance from the old iron-works was pointed out to me a silver-lead mine in limestone, and I was informed that the last sinking of the shaft (12 ft. long) 6 fms. produced about 120 tons of silver-lead, and near the surface that there was arsenical pyrites, black jack, &c. This extensive mineral property, it appears, is commanded by ample water-power beautifully situated, intersected by excellent roads, and about two miles from the quay at Kenmare! After seeing such an extent of mineral property, my first question to my friend was—"How is it with this vast mineral property before your eyes that you do not develop it?" His reply was—"That it was too practical a character for his countrymen to entertain, and that so long as a man could be found to talk to the people about 'Home Rule' and 'Repeal of the Union,' or grievances that occurred 1000 years ago, not a person could be found to invest a shilling in the development of the mineral or other resources of the country." After this statement, which I believed to be as true as the Gospel, I could not help asking myself the question—Is it not monstrous that my countrymen will squander millions in foreign swindles when they may invest thousands and make tens of thousands by it in such properties as I have hastily alluded to at home?

AN ENGLISH COMMERCIAL.

"DUES"—CORNISH AND CROWN.

Sir,—The subject of "dues," "dish," "royalty," or "rent," as the payments made to the "lord" or landowner, by the miner or mining company working his land for minerals, have been called at different times, is causing no little amount of attention just now, and is of vast importance to "One and All." In the ordinary way of leases, the "lord" grants a piece of ground for mining purposes, and stipulates—1, for a dead rent; 2, a royalty varying from 1-12th to 1-18th of all the produce raised from the mine; and 3, 1000l. per acre for all land damaged or destroyed by sinking shafts, depositing attle or rubbish, or in erecting machinery or dressing-floors.

In all cases the dead rent merges in the royalty—that is to say, if the rent is 500l. a-year it is paid until, or whenever, the royalty does not amount to that sum. When the royalty exceeds or comes up to 500l. a-year, it covers the dead rent. Much of the land let for mining purposes is poor, and of little value for agricultural purposes, and but for mining operations would be barren to the lord. Where there is an agricultural value he gets the dead rent of the miner in addition to the surface rent, and the skill, perseverance, and outlay of capital of the miner often brings up the royalty or rent of an otherwise worthless piece of ground to many thousands a-year to the lord. Again, the 1000l. an acre paid for all damages done to the surface is sometimes double or treble the value of the fee simple of the land. It may be said, too, on behalf of the miner, that he often works on for years and years raising ores at a loss to himself, but still having to hand over to the lord the "dues," or the stipulated portion of the produce, free from all charges and deductions. On the Duke of Bedford's estate there are mines which have paid him many thousands of pounds in dues, while the shareholders have never received one farthing, on the contrary, have had to pay repeated and heavy calls; but woe to the company that gets in arrears for "dues!"

Looking at the subject of "dues," therefore, in its proper light, and in all its bearings, we are not surprised it is creating so much attention, nor that we read nearly every week that many of the Cornish lords considering the depression of the times, and the heavy losses made by the miners of late years, are reducing their royalties at least one-half, and in other ways are meeting them in a more liberal and friendly spirit. I wish I could say as much for the authorities of the Crown, who ought to be the most liberal of lords, instead of the most grasping.

The Crown, or the "Woods and Forests," exact larger royalties and larger dead rents than most other lords, and some years ago adopted the plan of exacting also a quarter part of the profit made by any lessee of a mining lease! By this means mining in Wales and many other parts has received a severe check, and numbers of persons who would have otherwise spent capital in developing ground that might have become, ere this, valuable to the Crown, refused to have anything more to do with it, or the Crown authorities either.

Mining is speculative enough in itself, without this before-unheard-of tax on mining industry, and I cannot help thinking that if the case were properly brought before the House of Commons such an expression of opinion would be elicited that an end would be put to it, and a more liberal policy recommended and forced upon the Woods and Forests. Let us see how it now works: "A" takes a lease of the Crown; he has 500l. dead rent to pay and 1-12th royalty; he spends at his own risk (say) 10,000l. before he does any good for himself, he then makes a discovery which enables him to sell his property under the lease for 10,000l. profit; here the Crown steps in and takes 2500l. of it! having done nothing towards realising it, and having all the time that "A" was risking his money in a mere speculation exacted the full royalty and rent! Again, in Cornwall great complaint is made if the dues of a mine are as high as 1-12th, but the Crown, in the case of the richest mine in the country, exacts 1-8th. Great Laxey has paid over 150,000l. in royalty to the Crown, and is now paying 1-8th, or over 80,000l. a-year as rent for the mine.

ARGUS.

Unwrought Mining Ground of Gwennap, Cornwall.

Sir,—It is not a little surprising that large tracts of unwrought ground should for so many years remain idle for want of a little enterprise, especially seeing that they embrace the richest lodes yet discovered in Cornwall. It must be borne in mind that such discoveries have been made with an outlay of a small amount from the pockets of the shareholders; for instance, Tresavean divided a little over 60,000l. for the one year of 1833, after an outlay of only 1000l.; Penstruthal, with an outlay of less than 1000l., divided as profit among the shareholders in one year 65,000l.; further east is the Great Consols, which, with a mere nominal outlay, raised and sold in 18 years 1,845,000l. worth of copper ore, giving a clear profit to the proprietary of 320,000l., besides accumulating a plant valued at 90,000l.; and yet there are large sections of ground in the district embracing the same lodes which until lately have remained neglected, the same requiring an outlay of a few thousands to erect necessary appliances and sink down on the lodes to reap corresponding results. West Poldice is a piece of new ground, with an outlay from the shareholders of 1000l., is now giving dividends only 40 fms. below the adit, and for the month of May will sell about 1000l. worth of copper and tin, the present market value of the mine being about 40,000l., and going considerably higher as the mine progresses, and there yet remain several sets in the same neighbourhood which, with a well-directed small outlay, will unfold riches equal to any of those mentioned. Undoubtedly such properties are far preferable to the investor than embarking in undertakings where the capital required for merely pumping out the water is greater than the outlay required to prove some half-dozen mines in new and unwrought ground, and when such mines are situated in the midst of a rich

mining district, in connection with the desired elvans and inter-character usually attending resuscitated deep mines. The investor need not, therefore, send his money to develop the mining fields of America, giving Jonathan a large portion of it as promotion money, when we have such a vast amount of unexplored wealth in our own little home domain.

St. Day, Scovier, May 23.

CHAS. BAWDEN.

A Proposed New Industry for Cornwall.

Sir,—The Rev. C. M. Edward Collins, of Trewardale, in this county, and a member of the Royal Institution of Cornwall, at a meeting of that body on Tuesday brought forward a scheme—or rather suggested a scheme—should be brought forward—for the establishment of potteries in Cornwall. He had taken immense pains to accumulate facts bearing on the question, which he read from a lengthy and founded on voluminous correspondence, it appeared tolerably clear that potteries could be advantageously established at Fowey, Wadebridge, or at one of those places that it would be a profitable investment of capital to embark in the manufacture of earthenware near the places where the raw article is produced, instead of sending it to Staffordshire for manufacture, and then paying the carriage down. The reverend gentleman thinks that Cornwall and Devon at least might be supplied from a manufactory to be established in Cornwall to the benefit of both manufacturer and consumer. He wishes to have the subject ventilated, that it may be clearly seen whether his views are correct or not. Mr. J. H. Collins, F.R.S., the eminent county analyst, coincides with Mr. Collins in his opinion as to the success of such an establishment, and that after considering all the circumstances involved; but there was one gentleman at the meeting who expressed an adverse opinion, alleging that the carriage of coal would make it unprofitable. Probably some of your readers will kindly contribute information which may serve as a guide to capitalists, who may be invited to invest in a new industry for Cornwall.—Truro, May 25.

R. SYMONS.

Open Shafts.

Sir,—I see that at least one of the shafts to which I referred in my last letter on this subject has been fenced. It came under Dr. Foster's observation, and by calling Mr. G. Williams's attention to it, that gentleman immediately ordered it to be substantially fenced. I may here call the attention of parties concerned to the very serious danger to travellers which exists on the road from St. Austell to Roche from the large unfenced clay pits. Several of these pits are more than 100 ft. deep, and entirely unfenced; and some which are fenced are very imperfectly so. A gentleman who is a guardian of one of the Unions in Cornwall would like to be informed who is responsible for the loss of a horse, or for any injury resulting from these open pits? Whose duty is it to duly fence them—that of the trustees of the turnpike-road or that of the clay companies? What Act of Parliament applies to this?

May 25.

Mining v. Undermining.

Sir,—If a continuance of these papers should be the cause of such a letter as appeared in the Journal of last week from your correspondent George W. Denys being inserted, it may be hoped that some good may arise from them. We are altogether unacquainted with your correspondent, and do not know his address. We are, however, quite satisfied on one point—*i.e.*, he is a practical miner, and understands the subject on which he writes. We have been personally informed that an objection would be taken to our former remarks, and have consequently been expecting the same. We know that controversy begets truth, and when conducted in a proper spirit is interesting. The writer by no means believes himself infallible, and may have made an error on some points, and will be glad to be corrected. It is desirable that investors in mines should for themselves enquire into the facts of the case, and help the managers to establish a better mode of management. If this were done we are quite sure mining might be placed in a much more profitable position, especially as by adopting the true system of contract the work would be done at from 15 to 20 per cent. less price, and also in a much shorter time. A matter of great importance, as management, &c., would be the same, independent of the interest on money. We are also confident that the evil does not rest on labour alone, or even the directors or committee, but to some extent in merchants supplying engines, coal, timber, &c. We know in many cases these commodities are bought on proper terms, but we quite believe that there are many favoured ones, especially so among the most wealthy of them. The lords, too, in many cases are too exacting, and would serve their own interest by being more liberal. It is to be hoped the extreme period of depression through which we are passing may soon end. Copper, considering the condition of trade generally, is at a fair price, and stocks are not large; doubtless large quantities of this mineral have yet to be discovered in Cornwall, and we are glad to learn that efforts are being made to open up some new ground in one or two of its richest districts. The recent advance in the tin standards affords also a crumb of hope for the future, while lead mines, especially in Wales, appear to be on the ascendancy, as a proof of which we think the St. Harmon is convincing, that is if a notice in last week's Journal be correct. To raise a capital of 20,000l. in one week for a lead mine is a novelty in 1876. The pluck of the gentlemen who have subscribed the money is much to be commended, especially as another 7000l. on Consols is guaranteed in order to pay a dividend of 10 per cent. to the shareholders. It is right that first adventurers should have some advantage, and a company has a right to choose its own rules, but as mining is, and always has been, speculative, we fear the payment of dividends out of capital may act as a decoy duck to attract the unwary, and in some cases comparatively needy, investor. It does appear that out of the capital about one-third, 12,500l., remains for working the mine. This amount properly applied may lead to good results. A safety-valve is, however, necessary with the best of management, we believe, to prevent there being some amount of undermining here, and probably against the wish of the first shareholders.

Finsbury circus, May 24.

West Chiverton.

Sir,—At the last general meeting of shareholders the Chairman stated there had been some difficulty in connection with the granting of the new leases. As nothing further has transpired with reference to this matter, I presume it has been settled; but it would be more satisfactory to the shareholders, especially those residing in the country, if our respected committee or secretary gave an official assurance that the new leases were completed.

May 25.

New Rosewarne.

Sir,—The spiteful remarks of one of your advertisers of last week should not be allowed to pass without comment. As a country holder I was much surprised at it, and the result of my enquiry into the matter is this: At the meeting in April, which was attended by the holders of over 1000 shares, it was found that certain persons were heavily in arrears of calls, and as they had taken no notice whatever of the repeated applications made to them, a resolution was passed to the following effect—"That the secretary is hereby instructed to take legal proceedings to recover the arrears of calls." A copy of this was sent to those in arrears, and another appeal made for the calls; and last week, a month after the resolution was passed, the names of those still in arrears (among them that of your advertiser) was handed to a solicitor, with whom the matter then rested.

In regard to the condition or state of the mine, the shareholders were given to understand by the agents at the said meeting in April that they hoped for the current quarter to meet the costs from the sales of copper; they also stated in their published report that the appearances of the ends (for copper) presented every indication of permanency. I apprehend, therefore, that as a speculation New Rosewarne has as good prospects as many a thing pulled up by advertisers at fifty times the price; but whether the large holders

FOREIGN MINING AND METALLURGY.

The aspect of the Belgian coal trade is not improving; on the contrary, the production is being reduced more and more. Advice received from the Comptant de Mons state that a reduction of 10 per cent. in wages has been proposed to the miners, and has been accepted by them without difficulty. In many districts the miners are only working five days per week. There is no outlet for the present for small coal, and some coalowners are endeavouring in consequence to mix their products. The Fontaine-l'Évêque Colliery Company has published its balance-sheet for 1875; the profit indicated is 8530*l.*, which admits of the distribution of a dividend at the rate of 5 per cent. per annum. The Belle-et-Bonne Colliery Company will pay, June 20, a dividend for the second half of 1875 at the rate of 2*l.* 3*s.* 4*d.* per share.

A few current orders have been received in the Belgian iron trade, but the conclusion of no important contract has been reported. The depression which has so long afflicted Belgian industry appears likely, indeed, to continue. Nevertheless, some of the Belgian ironworks are increasing their plant, and making improved arrangements for the future. The Belgian Lion Rolling Mill for small iron at Coillet has been brought again into activity, and it is stated that the Centre Rolling Mill, which is devoted to the production of plates, is also about to be set to work again. It remains to be seen whether this latter statement is correct, since some of the Belgian works have almost empty order-books. It is expected that some more orders for plant will be given out shortly by the Belgian Government. The fifth volume of the second series of the "Annuaire de l'Association des Ingénieurs," educated at Liège, has just appeared. It contains interesting papers on the manufacture of white pig for hard iron by means of the minettes or oolitic minerals of the Luxembourg, by M. Wolters; on the establishments of the Providence Company; and on a complete system of warming passenger trains. This last article is by M. Belleruche, engineer-in-chief of the Great Central Belgian Railway. Tenders are wanted for the supply of a small number of passenger carriages and baggage-vans for the Danish State Railways.

In connection with the French coal trade, it may be observed that the Duchy-au-Bois Coal Mining Company has decided to increase its share capital from 144,342*l.* to 160,000*l.*, by an issue of 783 shares. The Council of Administration has also been authorised to raise money on loan to the extent of 20,000*l.*. The state of the French coal trade cannot be said to have improved; instead of brightening the markets have rather clouded over, and coalowners are beginning to realise the rather awkward fact that it is impossible for them to live on hope. In the Nord and the Pas-de-Calais there is little change to report; the extraction is not pressed forward very actively, the object being to avoid an accumulation of stocks. Coalowners are also devoting themselves with a certain willingness to exploratory works, that great resource of dead seasons. In the basin of the Loire the situation has assumed a new phase, a strike for higher wages having occurred at the Rive-de-Gier collieries. This manifestation will most likely be found inopportune, and it is not probable that the miners will gain anything by it; the administration of the collieries in question is stated to have decided on a lock-out.

There is little new to report with respect to the French iron trade. The hopes entertained as to the future are a little less vague than they were six months since; this is the utmost which can be said. There is no prospect of any advance in prices, the utmost that is hoped for in the Nord is the maintenance of a trifling advance established a month since. The Northern of France Railway Company is contemplating the establishment at Lille of large workshops for the construction and repair of rolling-stock; these workshops will, it appears, cover 50 acres, and they are expected to employ an aggregate force of 2000 workmen. The buildings are not expected to be completed before the expiration of two or three years.

Chilian copper in bars has made 83*l.* per ton at Paris; ditto, ordinary descriptions, 83*l.*; ditto, in ingots, 86*l.*; pure Corcoro minerals, 84*l.* 14*s.*; and English tough cake, 84*l.* per ton. The aspect of the German copper markets has experienced scarcely any change, and prices have been maintained pretty well. Brun tin, delivered at Havre or Paris, has made 5*l.* 12*s.* per ton up on the Paris market.

Straits copper, delivered at Havre or Paris, has brought 79*l.* per ton at Paris; and English tin, delivered at Havre or Rouen, has realised 80*l.* per ton at Paris. Tin has ruled firm at Marseilles, and the tendency of that market has been slightly upwards. At Rotterdam tin has been rather firmer, although transactions have been comparatively limited. Some small transactions have taken place in Banca at 49*l.* 1*d.* to 49*l.* 3*d.*; at the last dates there was some difficulty in finding sellers below 50*l.*. Billiton has risen from 44*l.* 1*d.* to 45*l.* 1*d.*. In Germany the tin markets have slightly improved. French lead, delivered at Paris, has made 22*l.* 2*s.* per ton; Spanish, 21*l.* 16*s.* per ton; English, 21*l.* 14*s.* per ton; and Belgian and German, delivered at Paris, 22*l.* 12*s.* per ton. The German lead markets have remained without change. Zinc quotations have slightly improved at Paris. Silesian, delivered at Havre, has made 25*l.* 16*s.* per ton; other good marks, delivered at Havre, 25*l.* 8*s.* per ton; and ditto, at Paris, 25*l.* 8*s.* per ton. The German tin markets have been generally firm.

FOREIGN MINES.

CHICAGO SILVER MINING COMPANY.—At a meeting of the directors the usual quarterly dividend of 4*s.* per share was declared, payable on the 31st inst.

ST. JOHN DEL REY.—Telegram from Morro Velho, May 22: Produce 10 days, first division of May, 12,000 oits., 4650*l.*; yield, 71 oits. per ton; profit for the month of April, 9100*l.*; All going on well.

ALMADA AND TIRITO.—Telegram from Mr. Brench: Profit for March, nil; loss 437*l.*. Political state of Sonora satisfactory. No change underground.

RICHMOND CONSOLIDATED.—R. Richard, May 4: The 700 is about the same as last reported. On Tuesday I received tenders for sinking the shaft and drifting the 800 ft. level. No ore contracts have been set yet; we shall only begin to break ore when the furnaces are ready to begin smelting. The new cylinder for the engine only arrived here yesterday; the gear is not yet here. We are going to try the small engine this afternoon, and if it is powerful enough to drive the three fans we shall light up the first days of next week. Charcoal is coming in pretty fast; the quality is not very good, some of it having laid in the pits all through the winter, and as we only receive newly burnt coal a great proportion of what comes in is refused. The weather is fine and the roads are good, and the supply of good coal will be more than equal to the demand.

CONDES COMPANY OF CHILLI.—Santiago, May 20: Mr. James Seeombe, who has just been sent out to represent the company in Chili, advises by telegram as follows:—Have made cursory examination of mines, and am satisfied they are very valuable. The Isolina Mine will easily produce 300 tons per month. I estimate in sight in the Isolina at 2000 to 3000 tons. Have taken fair sample from bottom of Isolina, and find produce 55 oits. of silver to the ton. The road is bad, and will require some repair. Means of transit difficult to obtain. Mine can be worked all the year round. Regular shipments can be made by storing the ores between Santiago and the mines. It is advisable to ship only the richest ores and smelt the remainder. It is included in the purchase.

CEDAR CREEK.—T. B. Lullum, May 4: I last had this pleasure on April 26, since then I have been enabled to keep all the claims under full headway, excepting the Badger. The Pacific, as mentioned in my list, we cleaned up on April 19. We realised 8 428-95, at an expense of \$1250-41; this claim is now washing to good advantage. The Central we cleaned up on April 20, realising 81739-92, at an expense of \$1250-41; we are running day and night, and are washing on the east run. The Yankee claim, as mentioned in my list, we partially cleaned up on April 21; I estimated the product at \$5000, it proved to be \$489-99. I expected to finish cleaning up on the 25th inst., but owing to delays in the Badger we will not be ready before the 28th inst. The total product, as well as expenses, will then be made up.—The Badger Claim: In this claim we exploded the powder blast on the 1st inst., and commenced washing on the 2nd, using water during that day about four hours. Yesterday owing to the bursting of the water pipes we were not enabled to wash more than three hours; to-day we have washed about ten hours. Our pit now is sufficiently large to wash to much better advantage.—Yankee Tunnel: I resumed tunnelling on the 1st inst., working with one shift of men. I intend to start the other shift in a few days.—Water Ditches: Our ditches are still running full, and I am utilising all that is possible.—Jehoshaphat Claim: I am washing in this claim part of the time, trying to recover what it has fallen behind. I do not expect much profit until we can pass the material through the Yankee Tunnel. I will forward a cost-sheet for April in a few days.

NEW ZEALAND KAPANGA.—James Thomas, April 7: Having to close before the end of our month, I can only give the length of cross cut driven to this date, of 15 ft.; total length driven, about 55 fms. from engine shaft. The ground during the last 4 fms. driving has been exceedingly hard for boring and blasting—much harder than any stone I have yet seen in the mine. I was obliged to get lithofracteur for blasting, powder being almost useless. This tough belt of ground is the hard capel and hanging wall of the lode, also seen in the old mine; now the water is further drained under the No. 2 level its position is plainer seen this month than last; and, judging from its appearance in the old workings, I expect we shall have yet to drive some 12 or 20 ft. further through this bar before we meet the lode. It is also quite possible that any blast may expose the lode. Most fortunately, in the end there is a very thin seam of flocon, carrying a regular, well defined vein on the north side of the cross-cut, and bearing the exact course to drive; this little flocon is of immense importance, as without such a advantage it would take a month to drive 2 fms. of the present ground. The stone is the given of this country; it is full of small stringers; it is very compact, and very little water showing in or about the end. The stamper have crushed 195 tons of old

refuse stuff from various portions of the old dump piles, yielding 1 ingot of molten gold, weighing 18 ozs. 17 dwts. 6 grs., or about 2 dwts. 8 grs. per ton of stuff. The utmost speed is being made in driving the cross-cut. The machinery is all working underground and at surface as well as it is possible, causing no stoppages or hindrances; and I am hourly and anxiously watching to see the lode.

CAPE COPPER.—Capt. Tonkin, Capt. Ninnis, March 23: Spoekakel, The level driving north from incline, in bottom of the 36, yields a little copper ore, but not enough to judge by the nature of the ground we think this point worthy of a thoroughly exhaustive trial. The end of the 27, east from flocon course, has just now intersected a ran of ground which is very congenial for the production of copper, and the present forecast to this discovery or not we are not at present prepared to predict, as we have not had time to open the ground. However any value reports, this eastern level is a good trial for a large piece of ground that should be thoroughly explored. We have no particular remarks to make respecting the stopes throughout the mine, as no changes worthy of special notice have taken place. We continue to suffer in the returns through the scarcity of water for dressing purposes.

TRIAL MINES.—Capt. Tonkin, Capt. Lanksbury, March 15: At Karolusberg the 20, east from shaft, yields a few stones of rich copper ore, but not enough to judge by the nature of the ground we think this point worthy of a thoroughly exhaustive trial. The cross-cut at the 10 is in hard and unproductive ground. The cross-cut in the 17 at Nabapeep is in poor ground, while the ground we are stopping for plat at the same depth yields fine lumps of purple ore. The cross-cut at Kilduncan is in hard and poor ground, but at times it yields a little copper ore of good quality. The 20, at Narrap, still looks promising, and it is too times to produce copper ore of moderate percentage.

Capt. Tonkin, owing to domestic affliction, has not been able to complete the Ookiep report, but he writes—"The 80 is yielding some fine stones of rich copper ore, but whether it is the beginning of the main bunch or not it is premature to predict."

Returns for March: Yield from Ookiep, 910 tons of 28 percent; from Spoekakel, 42 tons of 28 percent. Bills of Lading Received: 460 tons of ore per Towy, and 520 tons per Galatea.—Arrivals at Port Nolloth: The Taena, with outward cargo, and to load about 600 tons of ore; the Hondeklop to load about 400 tons of ore.—Arrivals at Swansburg: The Corsair and the Antonio Vincent, with together 1000 tons of ore.—Sales by Public Ticketing: 600 tons on April 25, at an average of 15*l.* 7*d.* per unit, realising approximately 14,000*l.*, and 650 tons on 9th inst., at an average of 15*l.* 9*d.* per unit, realising approximately 16,000*l.*.—Put forward for sale: 750 tons of ore on 23rd inst.

BENSBERG.—C. Craze, May 22: On Thursday last we stopped our engine for the purpose of cleaning our large boiler, as it had not been cleaned for over six months; at the same time we took the opportunity of chipping the bearings of the balance bob and engine, they having got worn by too continuous working. I am pleased to say that we got to work again on Saturday; the engine is now working more smoothly, and I find we can raise more steam with the same consumption of coal. We are making fair progress in forking, and hope by to-morrow to get under the 14 fm. level. I have ordered the doopiepe, &c., for the 7-in. lift, which the foundry people have promised shall be ready against Thursday next; as soon as they are here we shall lose no time in fixing the lift. There is no change whatever in the underground department since my last report.

PESTARENA UNIED.—T. Roberts, May 20: District Val Topps: In the third cross-cut westward from Zero level we have reached a part of the western lode; the main level a small branch, which is very probably a part of the western lode; a trial of the ore from this branch or lode made in the past week gave by amalgamation after the rate of 1 oz. 8 dwts. 10 grs. of sponge gold per ton. We continue to cross-cut westward in a favourable stratum for mineral. I am pleased to say that we have now fine weather, and fair progress is being made on the new works at Pestarena district.

LESTANIAN.—May 14: Pallal Mine: Taylor's Engine Shaft: The lode in this shaft, below the 150, is 6 ft. wide, composed of quartz.—Cross cut: In the 150, south of Basto's lode and east of River shaft, the ground is somewhat improved, and there are spots of lead in a small north and south branch on which we are driving. In winze No. 109, sinking below the 150, west of Taylor's shaft, the lode (Basto's) is worth 4 tons of ore per fathom for the length of the winze—5 ft.—Levels on Basto's Lode: West of Taylor's shaft, in the 150, the lode is yielding 14 ton of ore per fathom. In the 150 the lode is 3 ft. wide, composed of good looking quartz, with a branch of ore worth 14 ton per fathom. In the 150 the lode is 4 ft. wide, composed of quartz and ore, and worth 14 ton per fathom. The lode in the 150, east of River shaft, is 11 ft. wide, composed of quartz. The lode of Taylor's shaft and west of the side lode, the lode is small and without mineral value. In the 90, east of River shaft, the lode is 1 ft. wide, composed of white and flocon, with spots of ore in it; we have a small stream of water coming out of the south side of the level, which leads us to hope for a bigger and better lode. The lode in the 50, east of River shaft, is 14 ft. wide, composed of white and a little quartz. In the 28 east the lode is yielding 1 ton of ore per fathom. In the 50, west of the side, the lode is small and unproductive. The mill lode in the 50, east of River shaft, is small, composed of quartz and country. The counter lode in the 150, west of Taylor's, is 2 ft. wide, composed of quartz and stones of ore; the driving has been suspended. The plat at the 28 in River shaft is completed. Carvalhal: At the 60, west from the cross cut, the two lodes still continue in the end; the south one is much tighter than it was, and composed of quartz. The north one is not going so fast towards the north as it at first appeared to be, and is composed of quartz with spots of lead, and a little white iron.

[For remainder of Foreign Mines, see to-day's Journal.]

ASTHMA—CURE (THIS WEEK) BY DR. LOCOCK'S PULMONARY WAFERS.—May 22, 1876, from Mr. Welch, book-seller, Camelford:—"Mr. Barnard, farmer, St. Jul. St., Cornwall, for ten years suffered from asthma. Tried therapies and the result was marvellous." They taste pleasantly. Sold by all medicine vendors at 1*s.* 1*d.* and 2*s.* 6*d.* per box.

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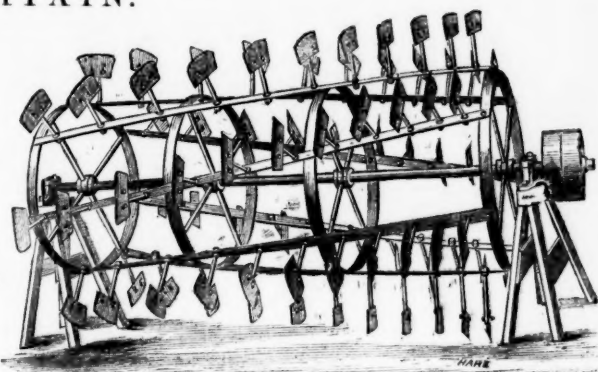
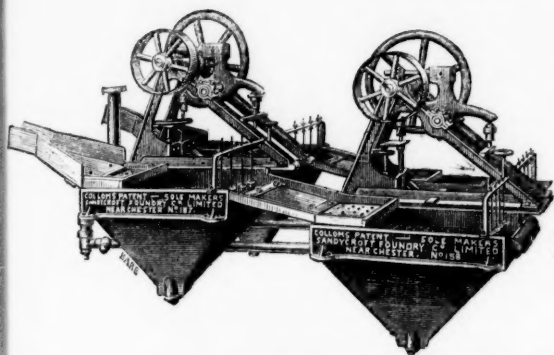
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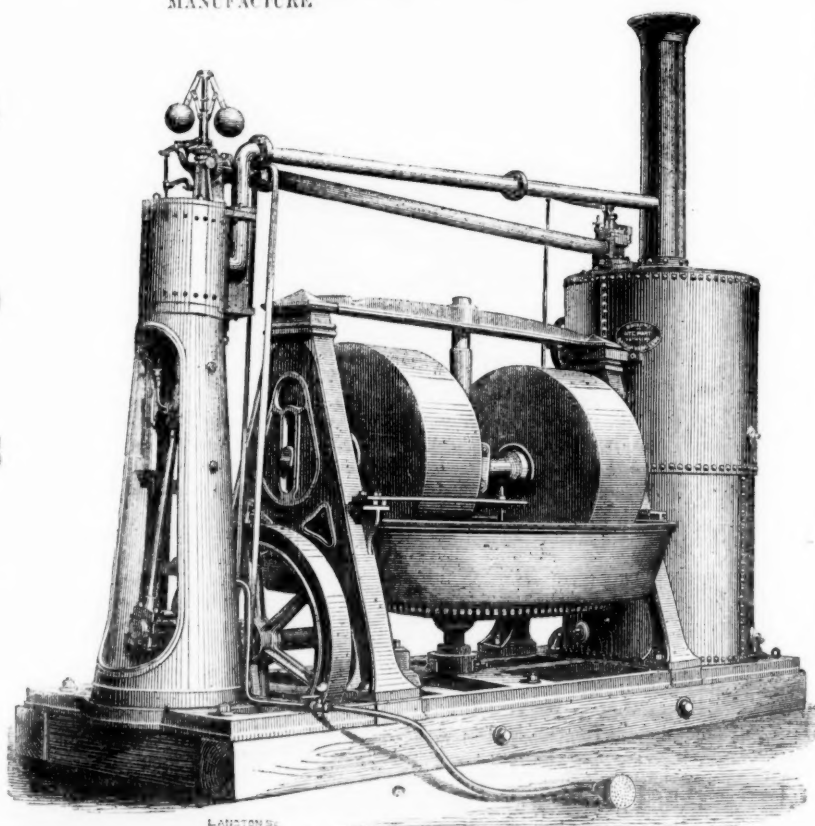
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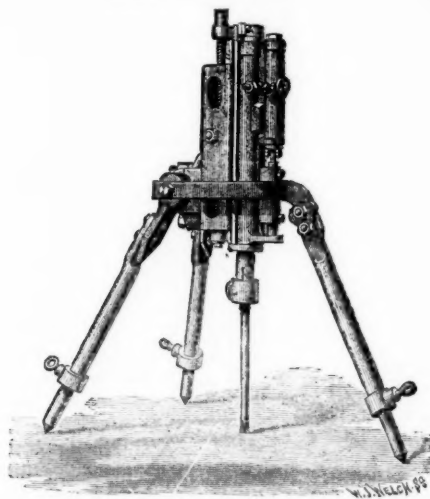
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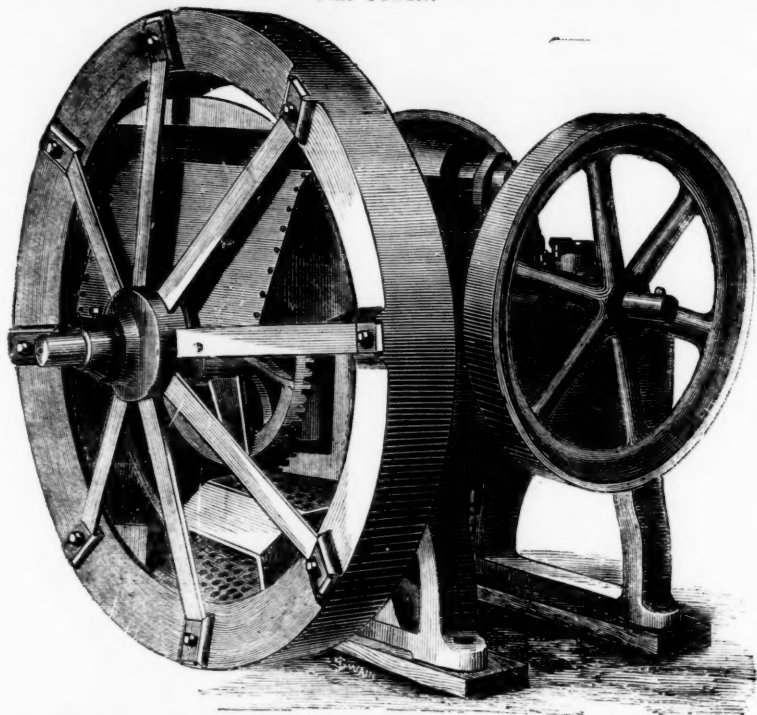
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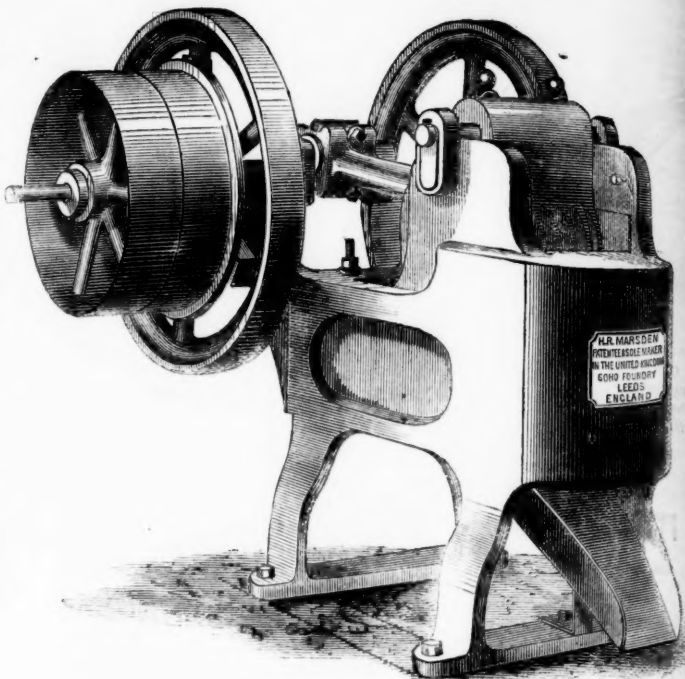
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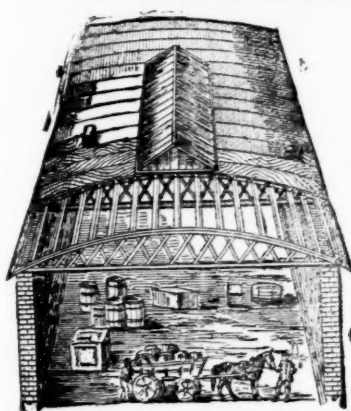
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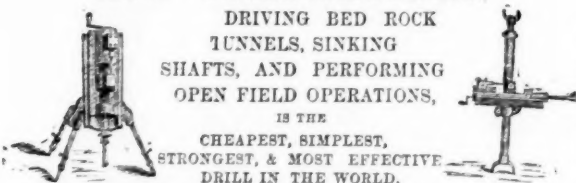
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